



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/817,874	03/26/2001	Chad D. Quist	DON01 P-889	7627

28101 7590 06/22/2005

VAN DYKE, GARDNER, LINN AND BURKHART, LLP
2851 CHARLEVOIX DRIVE, S.E.
P.O. BOX 888695
GRAND RAPIDS, MI 49588-8695

EXAMINER

LAO, LUN YI

ART UNIT PAPER NUMBER

2673

DATE MAILED: 06/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/817,874

Applicant(s)

QUIST ET AL.

Examiner

Lao Y Lun

Art Unit

2673

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 February 2005.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-85 is/are pending in the application.
- 4a) Of the above claim(s) 8,9,33,35,59,60,67,69,70,72 and 83 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7, 10-32, 34, 36-58, 61-66, 68, 71, 73-82 and 84-87 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 3-7, 10-21, 28-32, 34, 36-48, 51, 53, 54-55, 58, 61-66, 71, 73-82 and 84-87 are rejected under 35 U.S.C. 103(a) as being anticipated by UI Azam et al(5,566,224) in view of Takekawa(6,091,376) and Martinelli et al(5,943,044).

As to claims 1, 3-7, 10-21, 28-32, 34, 36-48, 51, 53, 54-55, 58, 61-66, 71, 73-82 and 84-87, UI Azam et al teach an interactive a vehicular mirror system comprising an interior rearview mirror assembly having a mirror casing and a reflective element with a rearward field of view (see figure 2; column 3, lines 60-67 and column 4, lines 54-57); a display(108)(see figures 1-2; column 3, lines 33-36); and a user actuable selector elements(separate buttons or touch display elements) (see figure 2; column 4, lines 61-68; column 5, lines 1-9 and lines 51-61; and column 9, lines 33-35). UI Azam et al teach a reflector(109, or 209, electrochromic mirror) is semi-transparent reflector and a display(108 or 208) located behind the reflector(109 or 209)(see figure 1-2 and column 3, lines 39-45). UI Azam et al teach a first display(e.g. 01) being generated in response to the first touch sensitive element(see figures 2; column 4, lines 58-68 and column 5, lines

Art Unit: 2673

1-12) and a second display(phone numbers(e.g. 708551212)) correspond to a second touch sensitive element(second touch display element or separate button)(see figure 2; column 4, lines 58-68; column 5, lines 1-12 and lines 60-65). UI Azam et al teach a first and second touch sensitive elements(01 or telephone number) provided on a bezel portion(see figure 2 and column 5, lines 9-12).

As to claim 1, UI Azam et al teach a display(108) provided at interior rearview reflective mirror(109)(see figures 1-2; column 3, lines 33-45 and column 9, lines 3-10) and the display(108) being generated in response to the user selector element(touch sensitive element) being actuated by the user(see figures 1-2; column 4, lines 58-68; column 3, lines 33-45 and column 5, lines 1-12).

UI Azam et al fail to disclose a second display is generated by actuating a second touch sensitive element. and fail to the touch sensitive elements having electrical capacitance for sensing a human finger approached to the sensitive elements.

Takekawa teach a first sensitive element(6, telephone number) and second sensitive element(END)(see figure 2a) and a selector first and second display elements(telephone number and speed of a vehicle) having a cognitive relationship established (see figure 2a, 2b and column 3, lines 16-54). Takekawa teach the touch sensitive elements(6) having electrical capacitances for sensing a human finger touching the sensitive elements(6)(see figure 3 and column 3, lines 55-67). It would have been obvious to have modified UI Azam et al with the teaching of Takekawa, so a user could enter any telephone number as he/she wanted.

Martinelli et al teach a sensitive element for detecting human finger approached or touched the sensitive element(see column 2, lines 14-20). It would have been obvious to have modified Takekawa with the teaching of Martinelli et al, so as to obtain the display information of user approach without of touch the sensitive elements and the touch sensitive elements would not easy to get dirty.

As to claim 3, Ul Azam et al teach the reflective element is electrochromic mirror(see figure 1 and column 3, lines 39-45)

As to claims 4-7, 19, 32, 34 and 66, Ul Azam et al tech the selector element is provided on au outer surface, a lower portion or perimeter portion of the reflecting element(209)(see figure 2; column 4, lines 62-68; column 5, lines 1-9 and lines 51-61 and column 9, lines 33-35).

As to claims 7, 64, 65 and 85, Takekawa teaches a touch sensitive element associated with more than one function(e.g. enter number "0" and OPER)(see figure 2(a)).

As to claims 10, 19, 36, 37-40, Takekawa teaches transparent touch sensitive elements(6)(see figure 3 and column 3, lines 55-67).

As to claims 11-14, Takekawa teaches the touch sensitive element having a transparent conductive coating(ITO)(see figure 3 and column 3, lines 55-68).

As to claims 16 and 62, Takekawa or Martinelli et al teach a display having an icon(see Takekawa's figure 2a; Martinelli's figures 1-2 and column 4, lines 1-9)

As to claims 17-18, 42-43, 63 and 80, Ul Azam et al teach a display(108) is an LCD display which has a transparent state(see column 3, lines 28-32).

Art Unit: 2673

As to claims 20, 31 and 81-82, UI Azam et al teach a reflector(109, or 209, electrochromic mirror) is semi-transparent reflector and a display(108 or 208) located behind the reflector(109 or 209)(see figure 1-2 and column 3, lines 39-45).

As to claim 21, UI Azam et al teach a semitransparent reflector(109) having a metal coating(chromium) and a transparent electrodes(electro-chromic mirror)(see figures 1-2 and column 3, lines 33-45).

As to claims 44 and 77- 79, UI Azam et al teach a fixed display and a scrolling display(telephone number area for displaying video images(see figure 2; column 3, lines 21-32 and column 5, lines 3-7).

As to claims 45-47, 58 and 76, UI Azam et al teach a mirror system comprising a rearward field of view image(see figure 2 and column 4, lines 54-57); a telephone information display and scrolling images(see figure 2 and column 5 and 3-9).

As to claim 51, UI Azam et al teach the reflective element is electrochromic reflecting element(109)(see figure 1; column 3, lines 39-45)

As to claims 54-55, UI Azam et al teach a mirror system comprising a rearward field of view image and telephone number information(see figure 2 and column 4, lines 54-57).

As to claims 73-74, UI Azam et al teach a display having an alpha-numeric image and a multi-pixel display(see figure 2 and column 3, lines 28-32).

As to claim 75, Takekawa teaches display element displays a family of display functions(see figures 2a-2b).

As to claims 86-87, Takekawa teach first and second touch sensitive elements(e.g. number or END) are visible(see figures 2a-2b).

3. Claims 22-25 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over UI Azam et al in view of Takekawa(6,091,376) and Martinelli et al(5,943,044) and Ide et al(4,707,570).

As to claims 22-25 and 27, UI Azam et al as modified fail to point out the structure of the touch sensitive element.

Ide et al teach a transparent touch sensitive pad comprising a plurality of stacked transparent conductive coating(indium tin oxide(ITO), 22A, 24A))(see figures 1-6); column 3, lines 23-32; column 5, lines 5-24 and column 6, lines 5-29). It would have been obvious to have modified UI Azam et al as modified with the teaching of Ide et al, since UI Azam et al has disclosed a system having an LCD display and a sensing function(see figures 1-2; column 3, lines 28-32; column 5, lines 3-9 and lines 51-61; and column 9, lines 33-35); Ide et al have disclosed a touch sensitive pad placed over an LCD display to perform a touch sensing function and a user could more clear how the system sensing a touch point.

As to claims 23-25, UI Azam et al teach an LCD display(108) or LED display(108) and the display(108) located behind the reflecting element(109)(see figure 1, and column 3, lines 29-45).

5. Claims 2 and 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over UI Azam et al(5,566,224) in view Takekawa(6,091,376), Martinelli et al(5,943,044) and Blank et al(5,576,687).

As to claims 2 and 49, UI Azam et al as modified fail to disclose the reflecting element having a prismatic reflecting element.

Blank et al teach a prismatic reflecting element(see figures 3A-3B; column 1, lines 56-68 and column 2, lines 1-20). It would have been obvious to have modified UI Azam et al as with the teaching of Blank et al, since Blank et al teach an electrochromic reflecting element could replaced by a prismatic reflecting element(see column 2, lines 12-17) and the prismatic reflecting element would be more common and economic than the electrochromic reflecting element.

4. Claims 26 and 52 are rejected under 35 U.S.C. 103(a) as being unpatentable over UI Azam et al(5,566,224) in view of Takekawa(6,091,376) and Martinelli et al(5,943,044) and Bauer et al(6,262,831).

UI Azam et al as modified fail to point out the reflector being removed to formed a window.

Bauer et al teach a rearview mirror system comprising a reflector(14) which has been partially removed from the mirror system(see figures 1-2 and column 2, lines 41-66). It would have been obvious to have modified UI Azam et al as modified with the teaching of Bauer et al, so a display information can be presented on a mirror surface.

5. Claim 50 is rejected under 35 U.S.C. 103(a) as being unpatentable over UI Azam et al(5,566,224) in view Takekawa(6,091,376) and Martinelli et al(5,943,044), Blank et al(5,576,687) and Bauer et al(6,262,831).

UI Azam et al as modified fail to point out the reflector being removed to formed a window.

Bauer et al teach a rearview mirror system comprising a reflector(14) which has been partially removed from the mirror system(see figures 1-2 and column 2, lines

Art Unit: 2673

41-66). It would have been obvious to have modified UI Azam et al as modified with the teaching of Bauer et al, so a display information can be presented on a mirror surface.

6. Claims 56-57 are rejected under 35 U.S.C. 103(a) as being unpatentable by UI Azam et al(5,566,224) in view of Takekawa(6,091,376) and Martinelli et al(5,943,044) and Schofield et al(5,786,772).

As to claims 56-57, UI Azam et al fail to disclose an image capturing device mounted on a side mirror.

Schofield et al teach a vehicular mirror display system comprising an image capturing device(20a, 20b) mounted on a side mirror(14, 16)(see figures 3-5; column 2, lines 57-68; and column 3, lines 1-14). It would have been obvious to have modified UI Azam et al with the teaching of Schofield et al, so as to assist the driver in a premaneuver evaluation of conditions surrounding the vehicle(see abstract).

7. Claim 68 is rejected under 35 U.S.C. 103(a) as being unpatentable over UI Azam et al(5,566,224) in view of Takekawa(6,091,376), Martinelli et al(5,943,044) and Friend et al(6,497,368).

As to claim 68, UI Azam et al as modified fail to disclose a back-lit touch sensitive element.

As to claim 68, Friend et al(6,497,368) teach a back-light touch sensitive element(137,138)(see figures 1-2 and column 8, lines 27-44). It would have been obvious to have modified UI Azam et al with the teaching of Friend et al, so a user could still input data in a dark environment(see UI Azam et al's column 8, lines 34-36).

Response to Arguments

8. Applicant's arguments with respect to claims 1-7, 10-32, 34, 35-58, 61-66, 68, 71, 73-82 and 84-87 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Baratono et al(6,889,064) teach a rear view mirror system having a touch screen.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lun-yi Lao whose telephone number is 571-272-7671.

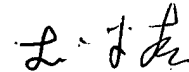
The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala can be reached on 571-272-7681. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306, after July 15, 2005, the fax number is 571-273-8300,

Art Unit: 2673

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

June 21, 2005



Lun-yi Lao
Primary Examiner